# SOME NOTEWORTHY MYRTACEAE FROM THE MOLUCCAS, NEW GUINEA, AND THE SOLOMON ISLANDS

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## With one plate

The following is an account of some Myrtaceae from the Pacific region submitted to me for determination by the Arnold Arboretum. It supplements a previous paper on "Some Papuan Myrtaceae" in this Journal (23: 80–92, pl. 1. 1942). The collection was small, but it contained a new genus with rather striking characters, and extended the known range of the genera *Eugenia* (sensu stricto), Mearnsia and Rhodamnia to the Solomon Islands.

Eucalyptopsis gen. nov.

Calycis tubus campanulatus supra ovarium leviter constrictus et deinde articulatus irregulariter disruptus et in lobos ad discum staminalem divisus. Petala nulla. Stamina numerosa, in fasciculos 4 disposita, in alabastris pendentia, filamentis rectis inaequalibus connectivi basim versus affixis; antherae loculis parallelis longitudinaliter dehiscentibus. Ovarium planum in fundo calycis inferum vel deinde semisuperum, biloculare; ovulis in loculis ca. 15 sed modo uno maturescente placentae peltatae affixis adscendentibus. Capsula lignosa parte superiore calycis tubo persistenti adnata, parte superiore libera et in valvis 2 loculicide dehiscens. Semina oblonga, magna, plano-convexa, saepe abortu solitaria; testa crustacea atro-castanea facie ventrali hilo orbiculari notata; cotyledonibus magnis corneis inaequalibus marginibus plus vel minus involutis, radicula vix exserta. Arbor magna. Folia subopposita, lanceolata. Flores in capitula vel umbellas 3–7-floras in paniculas terminales dispositi; calycum tubi liberi vel connati. Species 2 (?) moluccanae et papuanae.

## Eucalyptopsis papuana sp. nov.

Arbor magna, ubique glabra; trunco recto ad basin anteridifero; ramis patentibus foliorum coronam magnam ferentibus; cortice fusco suberoso plus vel minus laminato; ligno pallido-fusco oleoso; ramulis primum angularibus mox teretibus. Folia petiolata, subopposita, lanceolata, apicem versus angustata, apice ipso acuto, basi cuneata, margine in sicco leviter recurva, subtus pallidiora et opaciora; costa media valida subtus elevata; nervis lateralibus ca. 16 in utroque latere sed non semper nervis intermediis distinctis, venis et venulis subtus leviter elevatis, vena intramarginali nulla; petiolo contorto eucalypto simili, 1–1.5 cm. longo; lamina 12–16 cm. longa, 3.5–5 cm. lata. Flores in capitula 5–6-flora in panicula terminales dispositi. Calyx campanulatus, 1.2 cm. longus, ad oram 7 mm. latus, supra

<sup>\*</sup> Deceased, August 16, 1950.

ovarium 4 mm. longus leviter constrictus et deinde articulatus, parte supra ovarium 8 mm. longa ad apicem in lobos irregulariter disrupto; tubis in capitula connatis vel liberis. Stamina numerosa, 7 mm. longa; filamentis rectis connectivi basim versus affixis. Capsula lignosa, parte inferiore late turbinata vel cupularis, 1.5 cm. diam., parte superiore libera, 7 mm. alta, in valvis 2 loculicide dehiscens. Semina oblonga, plano-convexa,  $8 \times 5 \times 3$  mm., testa tenuiter crustacea, atro-castanea, basin versus hilo orbiculari notata.

INDONESIA: Moluccan Archipelago: Boeroe, Balobalo, alt. 100 m., Neth. Ind. For. Service bb.25162, July 1938, bb.31350, Dec. 1939, and bb.31361, Dec. 1939.

BRITISH NEW GUINEA: Western Division: Fly River, 30 miles above D'Albertis Junction, Oroville Camp, L. J. Brass 7406 (TYPE), Aug. 1936, plentiful in rain-forest canopy layer (very large tree, thick straight bole, crown of massive spreading branches; trunk buttressed at base; bark brown, somewhat scaly; wood pale brown, hard, oily; leaf nerves pale; flowers white). Eastern Division: Milne Bay, Kwato, J. B. McAdam 10 (large tree; local name "Malaha").

## Eucalyptopsis sp. aff. E. papuana C. T. White.

NETHERLANDS NEW GUINEA: Hollandia, Berap (Nimboeran), Neth. Ind. For. Serv. bb.28995.

Unfortunately the material available to me is very fragmentary, a few broken leaves and a couple of capsules. The leaves differ markedly from those of all the other specimens in being prominently reticulate in the dried stage on both surfaces. A sketch of a perfect leaf sent me by Dr. Perry also shows the apex to be acuminate rather than acute as in the Eucalyptus-like leaves of the other collections. Dr. Dadswell further informs me that the wood shows marked structural differences from E. papuana.

Outstanding features of this new genus are: (a) the Eucalyptus-like leaves; (b) the articulation of the calyx tube immediately above the ovary eventually shedding the greater part of the tube and the stamens; (c) the irregular disrupting of the calyx tube at its apex into lobes as far as the very highly placed staminal disk; and (d) the attachment of the stamens in four groups high up in the calyx tube and from which they are suspended in the bud stage.

The genus with most affinity to *Eucalyptopsis*, I should say, is the New Caledonian *Pleurocalyptus* Brongn. & Gris., which differs in having broad non-Eucalyptus-like leaves, free stamens, and an ovary that is almost wholly free from the calyx tube except at its very base, even in the youngest stages. Dr. H. E. Dadswell informs me this is the decision he had come to on the wood structure, though as far as *Pleurocalyptus* is concerned he had only very limited material to examine. The absence of an intramarginal vein in the leaf of *Eucalyptopsis* is a feature that distinguishes it from *Eucalyptus*. In the latter genus I cannot call to mind any species in which it is absent, and its distance from the margin and other features are used as diagnostic characters in the definition of a species.

The leaves of *Eucalyptus* are opposite and in some cases subopposite. This is a comparatively common feature in the juvenile stage. *Eucalyptopsis* comes close to *Syncarpia* Ten. and *Choricarpa* Domin, from both of which it differs in the absence of petals.

Though several sheets are quoted, the material in most cases is very scrappy. When I first drew up the description and had the plate made, only very young buds were available to me. Brass mentioned "fls. white" on his field label, however, and after much searching Dr. Perry managed to find a single fully developed flower. I did not dissect this as everything could be seen more or less from the outside. When more material is available, however, some modifications in the generic description may have to be made.

Eugenia (sensu stricto) salomonica sp. nov.

Arbor 10 m. alta, trunco basi anteridifero, anteridibus validis dorso rotundatis, cortice laevi pallido-fusco-griseo in fragmentis longis decorticato, ramulis teretibus vel primum indistincte quadrangulatis, internodiis 3-6 cm. longis. Folia glabra, minute vel minutissime sed vix copiose pellucido-punctata, breviter petiolata, elliptica vel elliptico-lanceolata vel fere ovato-lanceolata, basi acuta, apice plus vel minus gradatim acuminata, costa media utrinque prominula, nervis lateralibus utrinsecus ca. 14 utrinque subaequalibus sed tenuissimis et non semper manifestis, vena intramarginali 1-2 mm. a margine remota; lamina 7-9 cm. longa, 3.5-4.5 cm. lata; petiolo 2-3 mm. longo. Flores singuli vel deinde in cymas breves paucifloras dispositi; pedicellis 0.5-1 cm. longis pubescentibus subvalidis; bracteis ad basin pedicellorum et bracteolis sub calyce similaribus angustissime lanceolatis 3 mm. longis. Calyx 4-lobatus, lobis in alabastro valde imbricatis, tubo dense fulvo-tomentoso, lobis (in fructu vel in floribus a quibus petala et stamina delapsa sunt) 7-8 cm. longis 5 cm. latis extus brevissime fulvo-tomentosis, intus prominenter glandulosopunctatis. Petala (in alabastro modo visa) suborbicularia, 0.5 cm. diam. Stamina numerosa in ordinibus pluribus disposita; disco densissime fulvotomentoso. Ovarium biloculatum; stylo glabro. Fructus subglobosus (fide coll. 2 cm. diam. sed vix maturus) in sicco 1.5 cm. diam.

SOLOMON ISLANDS: Bougainville: Kieta, alt. 100 m., S. F. Kajewski 1574 (TYPE) March 1930, common in rain-forest (small tree up to 6 m. high; petals white-green; stamens white, conspicuous, with light brown semi-transparent anthers). Santa Isabel: Kalina Bay, F. S. Walker B.S.I.P. 301, Aug. 1946, common in lowland rain-forest in coral sand (tree 30 ft., buttresses stout rounded, extending into the trunk as flanges; bark smooth, pale brownish grey, shed in long scroll-like flakes, leaving paler patches beneath).

Mearnsia ramiflora (Lauterb.) Diels var. villosa var. nov.

Folia magnitudine formaque var. humili Diels (*Metrosideros arfakensis* Gibbs) similia sed ramulis junioribus et intermediis et foliis novellis dense sericeo-villosis; pilis in parte inferiore costae mediae in facie foliorum inferiore persistentibus.

NETHERLANDS NEW GUINEA: Genofo, alt. ca. 1000 m., Neth. Ind. For. Serv. bb.22565, April 1937 (communic. ex Herb. Hort. Bog.).

I have followed Diels (Bot. Jahrb. 57: 420. 1922) in regarding *Metrosideros arfakensis* Gibbs as a variety of *Mearnsia ramiflora* (Lauterb.) Diels. Judging from the description and illustration published by Miss Gibbs (Contr. Phytog. & Fl. Arfak Mts. 155. 1917) the present plant is very similar in appearance, the chief difference being that the branchlets and the leaves in the younger stage are densely villose, the hairs persisting on the adult leaves on the midrib of the lower surface.

### Mearnsia salomonensis sp. nov.

Arbor parva; plerumque epiphytica, partibus novellis tenuiter sericeis mox glabris, ramulis validis cortice atro-griseo obtectis. Folia petiolata, opposita, lanceolata subcoriacea, margine in sicco leviter revoluta, apice acuminata vel fere caudato-acuminata, basi cuneata, in sicco concoloria vel subtus leviter pallidiora, nervis lateralibus ca. 16 in utroque latere sed subobscuris in venam marginalem 0.5 mm. remotam conjunctis; lamina 7 cm. longa, 2–3 cm. lata; petiolo valido 3 cm. longo. Flores rosei vel rubri in cymas racemiformes ex axillis foliorum delapsorum e ligno vetere dispositi; ramulis pedicellisque tenuiter sericeo-pubescentibus, pedicellis gracilibus ca. 5 mm. longis. Calyx late turbinatus apud oram 5 cm. diam. tubo in parte inferiore valde angustato et 5-costato. Petala rubra, orbicularia, 2 mm. diam., basi in unguem angustata. Stamina 1.3 cm. longa. Ovarium immersum, loculis 4; stylo staminibus aequali. Capsula cupularis vel suborbicularis, 6 mm. diam., 4-locularis in calycem profunde immersa.

SOLOMON ISLANDS: Bougainville: Kupei Gold Field, alt. 100 m., S. F. Kajewski 1755, April 1930 (small parasitic tree, growing on large old weathered trees; very seldom seen on the ground; flowers very showy, stamens bright red; Lake Luralu, alt. 1500 m., S. F. Kajewski 2067 (TYPE: fls. & capsules), Aug. 1930, common in rain-forest (small parasitic tree usually growing on the larger, mossy, gnarled old trees of the higher levels; stamens bright pink, very showy). Guadalcanal: Tutuve Mt., alt. 1700 m., S. F. Kajewski 2628 (fls.), May 1931, common in poor scrub at high altitudes (small straggling tree with gnarled and twisted branches; fls. scarlet).

Metrosideros parviflora C. T. White in Jour. Arnold Arb. 23: 80. 1942.

SOLOMON ISLANDS: Ysabel: Tiratona, alt. 600 m., L. J. Brass 3340, Dec. 1932, common in rain-forest (large spreading tree, branching near the ground; bark pale brown flaky; fls. white); Cape Prieta, alt. 200 m., L. J. Brass 3471, Jan. 1933, common in loose soil on dry open slopes (small bushy-topped tree, 5-6 m. high; peduncles and pedicels brown; petals white, stamens green). Guadalcanal: Mt. Tutuve, alt. 1700 m., S. F. Kajew-ski 2624, May 1931, common in poor rain-forest at higher altitudes (small straggling tree with gnarled and twisted branches; fls. cream; fruit pink).

BRITISH NEW GUINEA: Central Division: Mt. Tafa, alt. 2300 m., L. J. Brass 4030, May 1933, common in mossy forest (erect tree 40-50 ft.; small crown, trunk corrugated; bark flaky and fibrous; hard red wood; leaves reddish when young, margin recurved; fls. white).

The leaves in *Brass 3471* are more coriaceous and more ovate-lanceolate than lanceolate, probably because of the low altitude and comparatively dry conditions under which the trees are growing. The *Kajewski 2624* specimen is in fruit with the remains of a few flowers here and there. It differs from typical *M. parviflora* C. T. White in having smaller, more coriaceous leaves, lanceolate in outline but not acuminate. I think these differences could be brought about by altitude and exposure.

## Metrosideros salomonensis sp. nov.

Arbor magna patens cortice fusco squamato obtecta; ramulis foliisque glabris. Folia opposita, lanceolata, apice caudato-acuminata, basi cuneata, supra subnitida, subtus opaca et leviter pallidiora, et sub lente minute punctata; costa media supra immersa, subtus elevata, nervis lateralibus crebris; vena intramarginali 0.5 mm. remota; lamina 5.5–7.5 cm. longa, 1.5–2.3 cm. lata; petiolo 0.5–0.7 cm. longo supra sulcato. Cymae plures in inflorescentiam terminalem corymbiformem dispositae, bracteis magnis sed mox deciduis, pedunculis subvalidis leviter applanatis trifloris ca. 1.5 cm. longis. Calyx late turbinatus 5-lobatus, tubo in pedicellum angustato, cum pedicello 0.8–1 cm. longo, ad oram 0.6 cm. diam., pilis sparsissime obsito; lobis late triangularibus 2 mm. altis. Petala staminaque cremea vel pallido-flava; petala suborbicularia, 4 mm. diam. Staminibus liberis, filamentis ca. 2 cm. longis, antheris 1.5 mm. longis. Capsula trilocularis, parte majore exserta, parte inferiore immersa sed basi excepta a calyce libera; valvis glandulis oleiferis paucis punctatis.

SOLOMON ISLANDS: Ysabel: Tiratona, L. J. Brass 3336, Dec. 1932, mountain forests (large spreading shapely tree with a dark brown scaly bark and very dark red, hard heavy wood; leaves stiff, underside paler, margins almost white; petals fugacious, almost transparent white, stamens cream-coloured); same locality and habitat, L. J. Brass 3401 (TYPE), Dec. 1932 (large handsome spreading tree with pale brown flaky bark and hard brown wood; leaves dark, stiff, underside pale; petals and stamens very pale yellow, young buds [bracts C. T. W.] red).

Among previously described species from the New Guinea-Solomon Islands region this comes closest to *M. brachyanthera* Diels, which has shortly and obtusely acuminate leaves, a many-flowered inflorescence, and coralline-coloured flowers, the stamens with a dark band above the base.

## Metrosideros sp.

SOLOMON ISLANDS: Bougainville: Kupei Gold Field; S. F. Kajewski 1713, alt. 1000 m., common in rain-forest (small parasitical tree growing on the old gnarled giants of the tops of the mountains). This specimen is in leaf only and probably represents an undescribed species.

#### OCTAMYRTUS Diels

The genus *Octamyrtus* was founded by Diels (Bot. Jahrb. 57: 373. 1922) to include *Eugenia pleiopetala* F. Muell. and two other small trees allied to *Rhodomyrtus*. The chief feature is the corolla, which is composed of (6–)8 petals, mostly of a rose-red colour, usually markedly

unequal in size, very imbricate and hiding the essential parts up to a late bud stage. As three new species are here proposed, a revised key to the six known species is given herewith.

1.	Flowers	in	the lea	if axils.				 	 	 2
	Flowers	on	the ol	der woo	od below	the	leaves	 	 	 5

## Octamyrtus arfakensis Kanehira et Hatusima in sched.

Arbor 12 m. alta, ramulis dense pubescentibus junioribus quadrangulatis. Folia anguste ovato-lanceolata, apice acuminata, basi obtusa vel sub-obtusa, supra deinde glabra vel glabrescentia, subtus in costa media et nervis praecipuis pilis longis densius ceterum sparse obsita; nervis praecipuis 8–10 in utroque latere, supra impressis subtus elevatis arcuatim ca. 5 mm. a margine remotis et plerumque in venam intramarginalem plus vel minus distinctam conjunctis et saepe vena submarginali cum primaria subparallela disposita; lamina 8.5–9 cm. longa, 2.5–3.5 cm. lata; petiolo 1 cm. longo. Flores (in alabastro bene evoluto modo visi) singuli, in axillis superioribus dispositi, pedicellis 5 mm. longis; bracteis linearibus vel anguste lanceolatis 5 mm. longis, dense pubescentibus. Calycis tubus cylindricus, densissime tomentosus, 5 mm. longus; lobis rotundis 4 mm. longis. Petala rosea (fide coll.) subrotunda, ca. 6 mm. diam.

NETHERLANDS NEW GUINEA: Arfak Mts., Angi, alt. 1900 m., R. Kanehira & S. Hatusima 14028 (TYPE), April 9, 1940, in the forest along the shore of Lake Gita (tree 12 m., fls. pink).

Though the flowering material available to me consists of two very young buds and one well-developed one, I have no hesitation in adopting the collectors' name. I would have preferred to wait for them to publish the description themselves, but Dr. Kanehira is, I believe, dead, and it may be an indefinite time before publication is otherwise made. The species is remarkable on account of the distinct veining of the leaves, but especially because of the very small flowers.

Octamyrtus Behrmannii Diels in Bot. Jahrb. 57: 376, fig. 1N. 1922, et Jour. Arnold Arb. 10: 251. 1929.

NORTHEAST NEW GUINEA: Sepik River, Behrmann 6969.

BRITISH NEW GUINEA: Central Division, Vailala River, L. J. Brass 1067.

Octamyrtus glomerata Kanehira et Hatusima in sched.

Arbor 6 m. alta ramulis validis, apicem versus 1.5 cm. diam., junioribus irregulariter quadrangulatis mox teretibus. Folia magna primum dense fulvo-tomentosa, deinde glabra, obovata, nervis lateralibus utrinque ca. 35, apice minute apiculata, basi obtusa (subauriculata?), lamina 70 cm. longa, 25 cm. lata; peticlo valido 1.5 cm. longo. Flores numerosi, in fasciculos glomeratos e ramulis vetustis infra folia orti; bracteae rubropurpureae (fide coll.), extus glabrae intus basim versus pilis longis appressis obsitae, 2-2.3 cm. longae, 1.5 cm. latae, parte superiore squarrosae parte inferiore late triangulares, basi obtusae, apice peracutae, bracteolis bracteis similibus sed angustioribus et ad 3 cm. longis. Calycis tubus subglobosus tenuiter pubescens 8 mm. diam., lobis 2 cm. longis 2 exterioribus ovatolanceolatis, 8 mm. latis, 2 interioribus angustioribus lineari-lanceolatis, 3-4 mm. latis. Petala flava (fide coll.) extus tenuiter pubescentia densius basim versus, intus parte inferiore pilis longis appressis dense obsita, 2 exterioribus majoribus 3 cm. longis 1.3 cm. latis, 2 interioribus 2.3 cm. longis 4 mm. latis (in flore uno imperfecto modo viso). Stamina non visa. Stylus glaber 5.5 cm. longus, stigmate capitato.

NETHERLANDS NEW GUINEA: Momi, 60 m. south of Manokwari, R. Kanehira & S. Hatusima 14126, April 10, 1940, in dense rain-forest (tree 6 m. high, trunk 10 cm. diam., petals yellow, sepals and bracts reddish purple).

In the habit of flowering on the older wood this species approaches O. Behrmannii Diels, but the floral characters of the two species are totally different. In the large bracts and calyx lobes it approaches O. insignis Diels, but in this species the flowers are borne singly in the upper leaf-axils. Unfortunately the material available to me is fragmentary. However, the remarks made under O. arfakensis Kaneh. & Hatus. regarding the naming of it also apply here.

Octamyrtus insignis Diels in Bot. Jahrb. 57: 374, fig. 1, A-M. 1922; Lane Poole, For. Res. Papua & New Guin. 128. 1925; White & Francis in Proc. Roy. Soc. Queens. 38: 251. 1927.

NORTHEAST NEW GUINEA: Dscheregi, Schlechter 17428, 19431. NETHERLANDS NEW GUINEA: Hollandia and vicinity, L. J. Brass 8867, June/July 1938, in secondary rain-forest (small tree).

BRITISH NEW GUINEA: Buna District, Wasida, Lane Poole 163.

Francis & White l.c. drew attention to a few differences in *Lane Poole* 163 from the type. *Brass* 8867, in very young bud, probably belongs here.

Octamyrtus lanceolata sp. nov.

Arbor 6–7 m. alta, cortice fusco in laminis tenuibus delapso, ramulis junioribus quadrangulatis dense fulvo-tomentosis. Folia lanceolata, apice acuta, mucronulata, basi anguste cuneata, supra costa media et saepe

nervis praecipuis tomentosa aliter glabra, subtus costa media et nervis praecipuis tomentosa ceterum glabra pilis sparsissimis excepta; nervis praecipuis 11–13 in utroque latere, supra leviter impressis subtus elevatis, venis et venulis subtus prominulis; lamina 11.17 cm. longa, 4–5 cm. lata; petiolo fulvo-tomentoso, 1–1.5 cm. longo. Flores singuli in axillis superioribus dispositi; pedicellis 4–5 mm. longis; bracteis dense fulvo-sericeis anguste ovato-lanceolatis 7 mm. longis saepe persistentibus postquam petala delapsa sunt. Calycis tubus primum anguste turbinatus deinde subglobosus, 7–8 mm. longus, densissime tomentosus, lobis late rotundis sed apice ipso acuto dense tomentosis, 4–5 mm. longis, 5–6 mm. latis. Petala atro-aurantiaca (orange-red fide coll.), margine ciliolata, inaequalia, exteriora 2 mm. longa, interiora 2.8 cm. longa, 7 mm. lata. Stamina rosea (fide coll.), filamentis gracilibus ad 4 cm. longis, antheris 2 mm. longis. Stylus 6.5 cm. longus, glaber, stigmate capitato.

BRITISH NEW GUINEA: Western Division: Middle Fly River, L. J. Brass 7701, Sept. 1936, common in light dry-type rain-forest (substage tree, 6-7 m. high; bark brown shed in thin flakes; petals orange-red; stamens pink).

This species is very closely related to *O. pleiopetala* (F. Muell.) Diels which differs in the elliptic to very broadly lanceolate leaves, in the mostly longer pedicels, and in the bracts being early deciduous. When more material has been collected it may be found that one must take a very broad concept of *O. pleiopetala* and fit these specimens in with it. For the present, however, I prefer to treat them as representing a distinct species.

Octamyrtus pleiopetala (F. Muell.) Diels in Bot. Jahrb. 57: 373. 1922.

Eugenia pleiopetala F. Mueller, Descript. Notes Pap. Pl. V. Add. 106.

1877.

Arbor parva (fide Brass), ramulis junioribus densius pubescentibus subquadrangulatis. Folia elliptica vel fere oblongo-elliptica vel late lanceolata supra deinde glabra costa media et nervis praecipuis basin versus excepta, subtus pilis sparsis obsita vel deinde glabrescentia; nervis praecipuis 8-9 in utroque latere (ad 12 in foliis majoribus in specimine Matapensi Clemens 11332); lamina 6-9 cm. longa, 2.5-4.5 cm. lata (ad 17.5 × 8 cm. in Clemens 11332); petiolo 5-7 mm. longo (ad 1.5 cm. in Clemens 11332). Flores rosei (fide Brass et Clemens); pedicello dense pubescenti 5 mm. longo (ad 1 cm., Brass 5671 et Clemens 11332); calycis tubo dense tomentoso, anguste turbinato 3 mm. longo (ad 7 mm., Brass 5671 et Clemens 11332) lobis rotundis vel oblatis dense tomentosis vel apicem versus glabris, 7-9 mm. diam.; petalis inaequalibus exterioribus brevioribus et latioribus 1.7 × 1 cm., interioribus longioribus et angustioribus  $2 \times 0.8$  cm., ad  $2 \times 1.3$  et  $3 \times 1.3$  cm. (Clemens 11332); staminibus numerosis, filamentis tenuibus (in typo 2.5 cm. longis; ad 4.5 cm., Clemens 11332), antheris basi fixis 2 mm. longis; stylo glabro, stigmate capitato. Fructus (fide Brass 11704) subglobosus in sicco ca. 1.3 cm. diam.

MOLUCCAS: Aru Islands, Lutor, O. Beccari (Piante delle Isole Aru), June 1873.

NETHERLANDS NEW GUINEA: Balim River, alt. 1600 m., L. J. Brass 11704, Dec. 1938, in a thickly forested gully (straggling tree, 3-4 m. high; fls. reddish pink); Idenburgh River, 4 km. SW of Bernhard Camp, alt. 850 m., L. J. Brass 13262, March 1939, rain-forest, occasional in flood plain seral growths (tree 3-4 m., fl. red).

NORTHEAST NEW GUINEA: Morobe District, Matap, alt. 5000-6000 ft., M. S. Clemens 11309, Feb.-April 1940 (tree 2 in. diam., fl. bud tip

purplish tint), also 11332 (tree 20-30 ft. high, fls. vivid rose-pink).

BRITISH NEW GUINEA: Central Division: Kubuna, alt. 100 m., L. J. Brass 5671, Nov. 1933, rare, rain-forest regrowths (small tree, leaves dull, pale-nerved, fls. solitary, axillary, reddish pink, petals closely imbricate around the reproductive organs).

## Rhodamnia salomonensis sp. nov.

Arbor parva, cortice fusco, ramulis subvalidis junioribus leviter applanatis mox teretibus. Folia lanceolata vel obovato-lanceolata, apice acuminata, acumine ipso ca. 5 mm. longo, basi acuta, margine leviter recurva, utrinque pilis brevissimis sparse obsita vel deinde fere glabra, prominenter triplinervia, nervis 2 praecipuis oppositis vel alternis supra basin laminae 0.5-0.8 cm. remotis, nervis lateralibus 7-9 in utroque latere, in sicco cum venulis utrinque prominulis, vena intramarginali 0.5-1 mm. remota; petiolo sparse et breviter pubescentis, 0.6-1 cm. longo; lamina 6-10 cm. longa, 3-5 cm. lata. Flores in cymas dichotomas in axillis superioribus dispositi vel inflorescentia in juventute uniflora; inflorescentiae ramulis pedicellis calycibusque dense pubescentibus, pedicellis 4 mm. longis. Calyx 4 cm. diam., 5-6-lobatus lobo uno aliis multo majore. Petala 5 in alabastro valde imbricata, 3-4 mm. diam. Stamina numerosa, filamentis applanatis 4-5 mm. longis, antheris 0.75 cm. longis basifixis, connectivo filamento continuo. Ovarium uniloculare.

SOLOMON ISLANDS: Ysabel: Kakatio, alt. 900 m., L. J. Brass 3257, Dec. 1932, common in mountain rain-forests (small brown-barked tree; leaves pale on under surface; fls. coloured pink).

I cannot find any previous record of Rhodamnia in the Solomon Islands. However, the finding of the genus there was to be expected. The present species bears no great similarity to any other Rhodamnia with which I am acquainted. The anthers with the loculi borne on either side of a rather broad connective which seems continuous with the filament is remarkable. The ovary is 1-celled, but I could find no ovules in the few I examined. It is possible that when fruit is obtained it may prove the tree to be the type of an undescribed genus. On the basis of material at present available, however, I think it should be included in Rhodamnia Jack.

## Rhodamnia propinqua sp. nov.

Arbor 14-15 m. alta, cortice fusco fibroso rimoso gummi rubrum scatenti ramulis tomentosis. Folia late lanceolata vel ovato-lanceolata,

apice gradatim acuta vix acuminata, basi cuneata, supra glabra in sicco castanea, subtus valde pallidiora, dense tomentosa, trinervia; nervis praecipuis supra impressis subtus elevatis, nervis transversis tenuibus, supra obscuris, subtus leviter elevatis, venulis obscuris; petiolo dense tomentoso, 5–6 mm. longo; lamina 7–9 cm. longa, 2.5–4 cm. lata. Flores axillares singuli vel bini; bracteis ad basin pedicellorum linearibus dense ferrugineo-tomentosis 4–5 mm. longis; pedicellis strictis dense ferrugineo-tomentosis 1.2–1.5 cm. longis; bracteolis sub calyce bracteis similibus. Calyx 4-lobatus, tubo late campanulato dense fusco-tomentoso, 5 mm. diam., lobis late triangularibus utrinque densissime fusco-tomentosis. Petala 4 late obovato vel suborbicularia, 5 mm. longa, 4 mm. lata, extus densissime tomentosa, intus glabra densius pustulato-punctata.

BRITISH NEW GUINEA: Western Division: Tarara, Wassi Kussa River, L. J. Brass 8555 (TYPE), Dec. 1936, common in substage (fls. white); same locality and date, L. J. Brass 8592 (substage or lesser canopy tree, attaining 14–15 m. in the rain forests, bark brown, soft, fibrous, fissured, exuding a reddish gum when cut; fls. white).

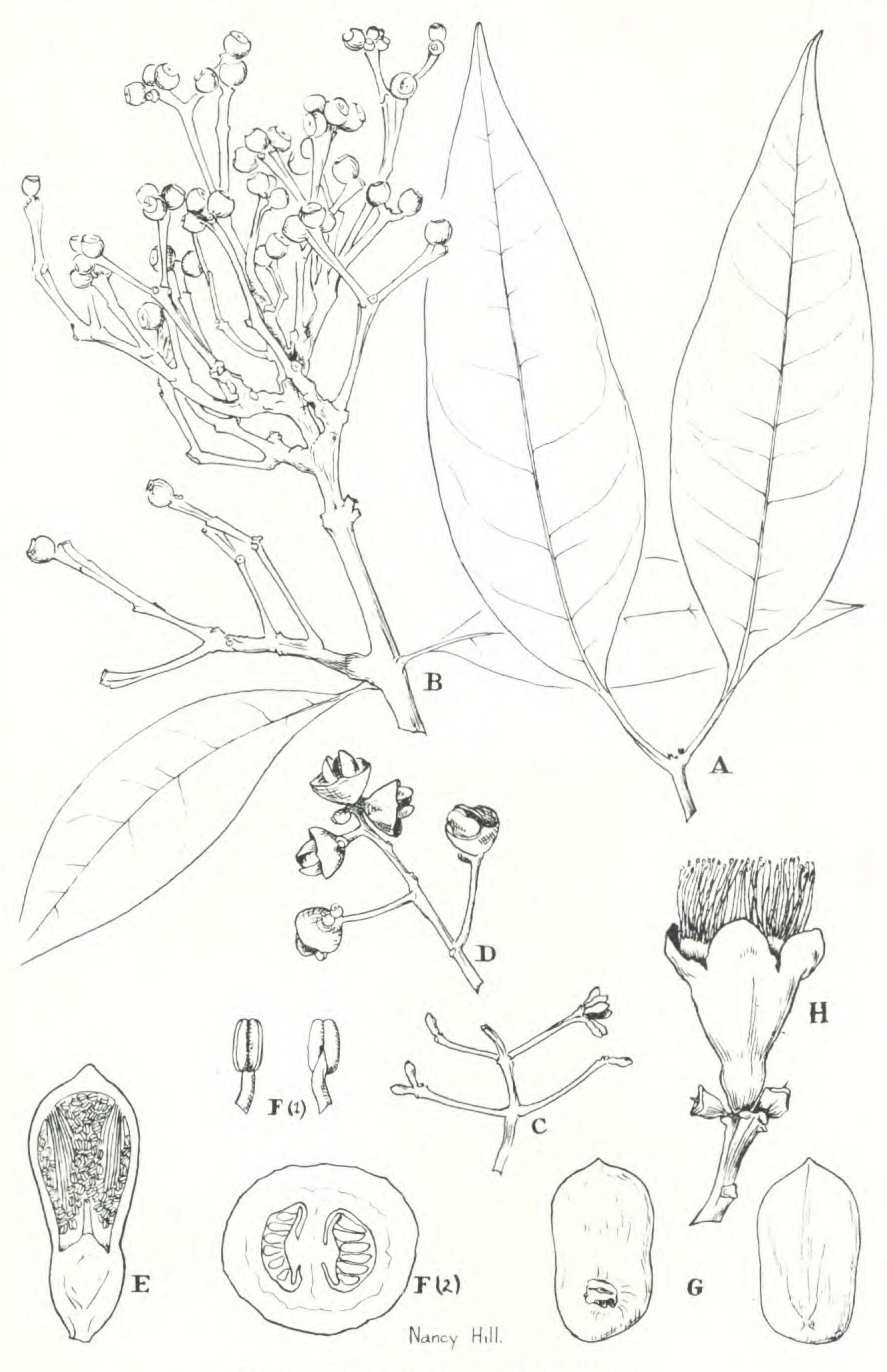
The present plant undoubtedly comes very close to the Australian R. Blairiana F. Muell. and resembles it more closely than it does any of the species previously recorded for New Guinea. I would hesitate to differentiate the two species but for the fact that R. propingua C. T. White is a native of lowland New Guinea and R. Blairiana F. Muell. of the mountains of northeast Queensland. The chief difference is that in the former the leaves are trinerved, whereas in the latter they are definitely though only slightly triplinerved with one of the two main lateral nerves coming off from the midrib slightly higher than the other. The leaves of R. propingua C. F. White are larger — especially wider — than those of F. Blairiana F. Muell. and on longer petioles; the pedicels also are longer.

To fit into the key to the New Guinea species published by Diels (Bot. Jahrb. 57: 358–360. 1922) a new group would have to be added as follows:

D. Leaves in the dried state soon becoming brown, under surface lighter brown, slightly tinged with grey in the older leaves, under surface densely tomentose, the tomentum obscuring the ultimate veinlets.

### Rhodomyrtus obovata sp. nov.

Arbor 10–15 m. alta, cortice crasso plus vel minus suberoso laminato, atro-fusco inciso; ramulis subvalidis, junioribus angulatis dense fusco-pubescentibus. Folia obovata, elliptica vel elliptico-oblonga in sicco margine leviter recurva, apice obtusa, basi subobtusa, vel acuta supra costa media pubescentia, nervis venisque primum tenuiter pubescentia mox glabra, subtus pilis densioribus et persistentioribus; nervis praecipuis 5–6 in utroque latere, supra leviter impressis, subtus elevatis; petiolo 1.5–2 cm. longo dense pubescenti; lamina 6–9 cm. longa, 3–6 cm. lata. Flores singuli, sessiles in axillis superioribus; bracteis sub calyce linearibus 3 mm.



EUCALYPTOPSIS PAPUANA C. T. WHITE

longis dense pilosis. Calycis tubus dense griseo-pilosus, 5 mm. longus; lobis 4 extus dense griseo-pilosis. Petala oblonga vel plus vel minus obovata, 1 cm. longa, prominenter et dense glanduloso-punctata. Stamina numerosa, petala aequantia; filamentis leviter applanatis; antheris connectivi basin versus dorsifixa. Stylus glaber, validus; stigmate incrassata crasse discoidea.

BRITISH NEW GUINEA: Western Division: Mabaduan, L. J. Brass 6566, April 1936, common and conspicuous in savannah forest (tree 10-15 m., bark thick somewhat corky, layered, chocolate brown when cut); Tarara, Wassi Kussa River, L. J. Brass 8678 (TYPE), Jan. 1937, common in rain-forest along streams (small tree, fls. white).

The present species at first glance is very like R. macrocarpa Benth. of Queensland and New Guinea, but the two can be easily distinguished as follows:

Leaves obovate, elliptic or elliptic oblong, apex obtuse, lateral nerves 5-6 on each side of the midrib; flowers solitary in the upper axils. R. obovata.

#### EXPLANATION OF PLATE

Eucalyptopsis papuana gen. et sp. nov. [Figures A, B, F<sub>2</sub>, H, drawn from the type-collection, L. J. Brass 7406; the others from the Moluccan collections.] Fig. A. Leaves. Fig. B. Branchlet with young infructescence. Fig. C. Part of inflorescence. Fig. D. Capsules. All 2/3 nat. size. Fig. E. Flower bud in longitudinal section,  $\times$  6. Fig. F(1). Anther, front and back view,  $\times$  14. Fig. F(2). Ovary, transverse section,  $\times$  6. Fig. G, Seeds, front and back view,  $\times$  3. Fig. H. Flower,  $\times$  2.

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